

CITY OF LAWRENCEBURG

CITY OF LAWRENCEBURG BOARD OF MAYOR & COUNCIL MEMBERS

INVITATION TO BID

FOR

HOT-IN-PLACE RECYCLING FOR THE CITY OF LAWRENCEBURG

**City of Lawrenceburg
Public Works Department
100 Ezell Drive
Lawrenceburg, TN 38464
(931) 762-3255**

Bid Prepared By:

Invitation to Bid Number:

City of Lawrenceburg Public Works

May 8, 2012

Sealed bids, subject to the specifications and conditions contained herein and attached hereto, will be received at the City Administration Building, until, but no later than 10:00 a.m. (CST) local time prevailing May 29, 2012 and then opened and read for Hot-in Place Recycling for the City of Lawrenceburg Public Works Department, as authorized by the City of Lawrenceburg Mayor & Board of Council Members.

No bid can be withdrawn after the scheduled closing time for receipt of bids for sixty (60) calendar days.

To be considered, your bid must be submitted on the copy of this Invitation to Bid. Bidders shall sign this form in the space provided and return bid document to William McLain, City Administrator, 233 West Gaines, NBU 4, Lawrenceburg, TN 38464. Bids shall be returned in an enclosed bid envelope, properly completed and sealed. Bids will not be accepted via fax machine or email.

Time is of the essence and bids received after the announced time and date for submittal, whether by mail or otherwise, will be rejected. Late bids received will be so noted in the bid file in order that the vendor's name will not be removed from any future bid/vendor list.

Bids will be awarded accordingly as prescribed by law which states Lowest and Best. A Supreme Court ruling states that the discerning of best lies on those requesting the bid and not the bidder. The right is also reserved to refuse any and all bids.

It is the policy of City of Lawrenceburg, Tennessee to ensure compliance with Title VI of the Civil Rights Act of 1964; 49 CFR, Part 21. No person shall be excluded from participation in or be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance on the grounds of race, color, sex, disability, or national origin.

DESCRIPTION

Construct the hot-in-place recycling of the existing asphalt surface as specified in the contract documents. The activities associated with this work include heating the existing pavement, scarifying and/or shearing the existing surface, adding a rejuvenating agent, mixing, spreading, leveling, and compacting the recycled material. This process referred

to as Hot-In-Place Recycled Asphalt Pavement (HIR). The term surface recycling and HIR are synonymous in the specification.

BID ITEMS	UNITS	
Surface Recycling	Square Yards	(20,000 Square Yards Minimum)
Asphalt Rejuvenating Agent	Gallon	

MATERIALS

Asphalt Rejuvenating Agent (ARA). Provide ARA (emulsion or oil) that complies with local DOT.

CONSTRUCTION REQUIREMENTS

A. Pavement Preparation. Before commencing surface recycling, remove all material from the surface of the pavement that would be detrimental to the HIR.

B. Heating and Shearing/Scarifying Operations. During heating and shearing/scarifying, begin work to fulfill the following requirement:

One-Pass Operation.

- (a) The heating units shall be of sufficient capacity to heat the pavement material as necessary for efficient processing, but be designed as to minimize the damage to the asphalt binder. The heating system shall also have provisions for cooling the asphalt surface to 350°F.
- (b) The self-containment requirement for the recycling unit shall mean once the existing asphalt pavement is sheared, it remains contained in the recycling unit, and shall be immediately mixed with the rejuvenating agent. The recycled asphalt pavement shall not be exposed to atmospheric conditions except when placed for compaction.
- (c) The surface of the existing pavement shall be heated, rejuvenated, and remixed to a two inch nominal depth.

Flames on the pavement can be prevented by heating the roadway more slowly using additional heaters. Intermittent or occasional flaming on the roadway or in the window that extinguishes on its own within 10 seconds is permissible, but if in the opinion of the Engineer it is detrimental to the final product, production will cease. In addition, production will cease when smoke is being produced continuously. (Smoke caused when the heaters pass over a maintenance patch is excluded from this clause.) The Contractor and Engineer will agree to a course of action to prevent this overheating before production is resumed. If flames or excessive smoke persist, then production is ceased until the Contractor modifies the operation and can demonstrate acceptable results without smoke or flames on the pavement or in the windrows. Provide adequate provisions for equipment calibration.

C. Process Control.

(1) Depth Check. The Engineer will determine the depth behind the screed by probing 3 points and using the average of the 3-point probe tests of the un-compacted surface.

(2) Ring Test. The depth of scarification will be determined by scraping out and

weighing the heated and scarified material from a one square foot area. This weight shall be 75% of the theoretical weight of one square foot by 1" of compacted bituminous surface course.

(3) Temperature Requirements. Maintain the temperature of the HIR, directly behind the paver, between 190°F and 300°F. HIR temperatures taken within 2 feet of each other, transverse to the roadway, shall not vary by more than 30°F.

D. Rejuvenating and Mixing Operations. After heating, begin work to fulfill the requirements of the following rejuvenating and mixing operations:

One-Pass Operation.

(a) Use a recycling/remixing unit capable of loosening the heated asphalt pavement to the specified depth in a uniform pattern, loading existing asphalt and adding heated rejuvenator into a heated mixing plant for a minimum of 30 seconds. The rate of application of the rejuvenating agent shall be adjustable to maintain the appropriate application rate in the relation to the operating speed of the machine. Metering devices shall be incorporated into the distribution systems for recording the quantities of asphalt rejuvenating agent. The mixing shall take place in a heating rotating drum mix plant for at least 30 seconds in such a manner to ensure complete blending. On-board asphalt plant temperature must be maintained at a minimum of 300°F in order to establish an environment for maximum blending and coating.

E. Spreading and Compacting Operations. Immediately following heating, scarifying, adding ARA and mixing operation, begin work to fulfill the requirements of the following operations:

(1) One-Pass Operation.

- (a) Spread and finish the rejuvenated mixture with an acceptable attached paving screed.
- (b) Provide density using an approved rolling procedure. The Public Works Director will determine the initial approved rolling procedure from densities obtained with various roller combinations. Density will be determined by using a nuclear gauge. Use the approved rolling procedure. If there is a significant change in factors affecting density, such as weather or compaction equipment, the Engineer will reevaluate and modify the rolling procedure as required. Stop the HIR operation whenever rolling is not being performed according to the approved rolling procedure.
- (c) Compaction shall be accomplished with an 8 to 10-ton steel wheel roller in vibratory and/or static mode as needed. The roller shall be equipped with an adequate scraping or cleaning device on each wheel to prevent the accumulation of material on the wheels. When used for the compaction of bituminous mixtures, the roller shall be equipped with a water system that will keep all wheels uniformly wet to prevent material pickup when required.
- (d) Maintain the rejuvenated pavement surface until the surface treatment shown in the Contract Documents is completed. Spread blotter sand when directed by the Engineer. When required, apply a tack coat before placing the surface

treatment. If a HMA overlay is included in the Contract Documents, start the HMA a maximum of 2 weeks after spreading and compacting the HIR. If a seal coat, asphalt seal, micro-surfacing or ultra-thin bonded asphalt surface is included in the Contract Documents, allow the HIR surface to cure before sealing.

F. Weather and Seasonal Limitations. Construct surface recycling when the surface is dry, and the weather is not foggy or rainy. Construct surface recycling when either the ambient air temperature is equal to or greater than 45°F or the road surface temperature is equal to or greater than 55°F. The above requirements may be waived with written approval from the Engineer.

G. Traffic. Traffic shall not be allowed on the compacted pavement until it has cooled sufficiently to prevent dislodging of the aggregate. Any areas, which are damaged by traffic, shall be repaired at no additional cost, as directed by the Engineer.

H. Pavement Conditions. Pavement to be treated with the One Pass Operation type of HIR process requires a nominal 3" of hot mix asphalt. Should pavement within the scope of work contain less than the nominal 3", the Contractor shall not be required to meet aforementioned specification.

MEASUREMENT AND PAYMENT

The Engineer will measure surface recycling by the square yards. The Engineer will measure asphalt rejuvenating agent by the gallon. Payment for "Surface Recycling" and "Asphalt Rejuvenating Agent" at the contract unit prices is full compensation for the specified work.

For further information, please contact Jerry Smith, Public Works Director, at 931-762-3255.

PLEASE QUOTE PRICE AS OF MAY 29, 2012
PRICE FOR SURFACE SCARIFYING PER SQUARE
YARD_____

PRICE FOR ASPHALT REJUVENATING AGENT PER
GALLON_____

ALL VENDORS MUST SUBMIT A W-9 FORM WITH THEIR BID RESPONSE

BIDDER INFORMATION:

Name of Bidder:

(Typed or Printed: Firm, Corporation, Business or Individual)
Business Address: _____

Business has been in business under its present name since: _____

At this present time we understand all requirements and state that as a serious bidder we will comply with all the stipulations included in this package.

The above named bidder affirms and declares:

1. That the bidder is of lawful age and that no other person, firm or corporation with other person firm or corporation has any interest in this proposal or in the contract proposed to be entered into.
2. That this proposal is made without any understanding, agreement, or connection with any other person, firm or corporation making a proposal for the same purpose, and is in all respects fair and without collusion or fraud.
3. That the bidder is not in arrears to City of Lawrenceburg upon debt or contract and not a defaulter, as surety or otherwise, upon any obligation to City of Lawrenceburg.
4. That no officer or employee whose salary is payable in whole or in part from the City Treasury shall be or become interested, directly or indirectly, surety or otherwise in this proposal, in the performance of the Contract, in the supplies, materials, equipment and work or labor to which they relate, or in any portion of the profits thereof.

BIDDER: _____

BY: _____

(Authorized Signature in Ink)

PRINTED NAME OF SIGNER: _____

TITLE OF SIGNER: _____

DATE SIGNED: _____

PHONE NUMBER OF SIGNER: _____